

FIG. 1 PRIOR ART

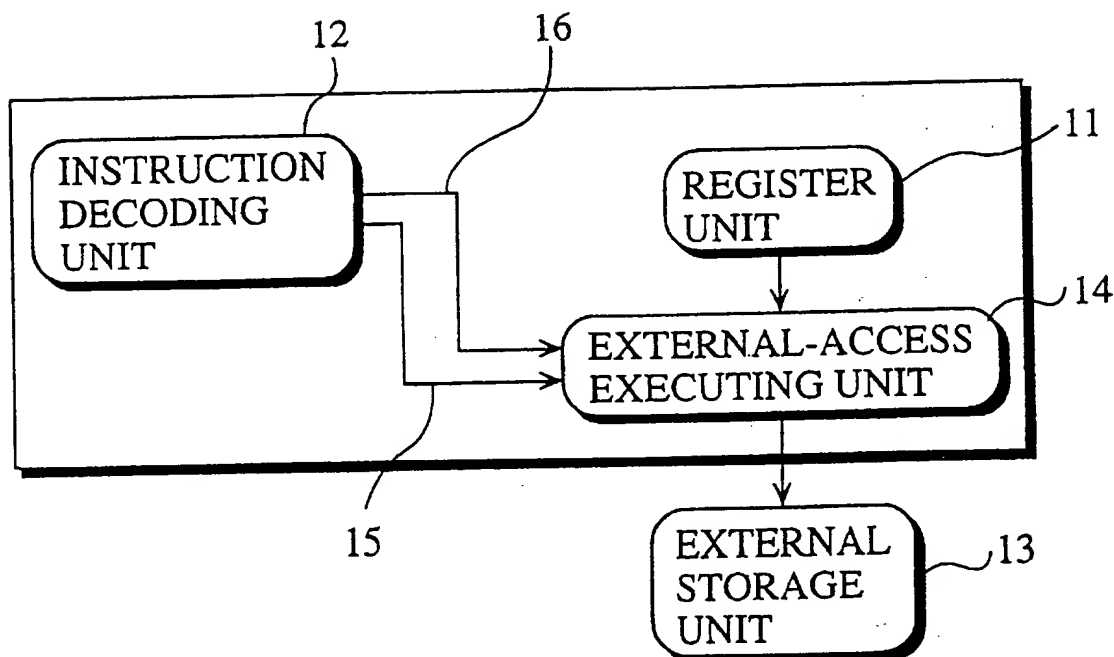


FIG. 2 PRIOR ART

| OP | SIZE | SRC | DEST |
|------|-------|-----|------|
| MOVE | 32bit | A1 | @A2 |

FIG. 3 PRIOR ART

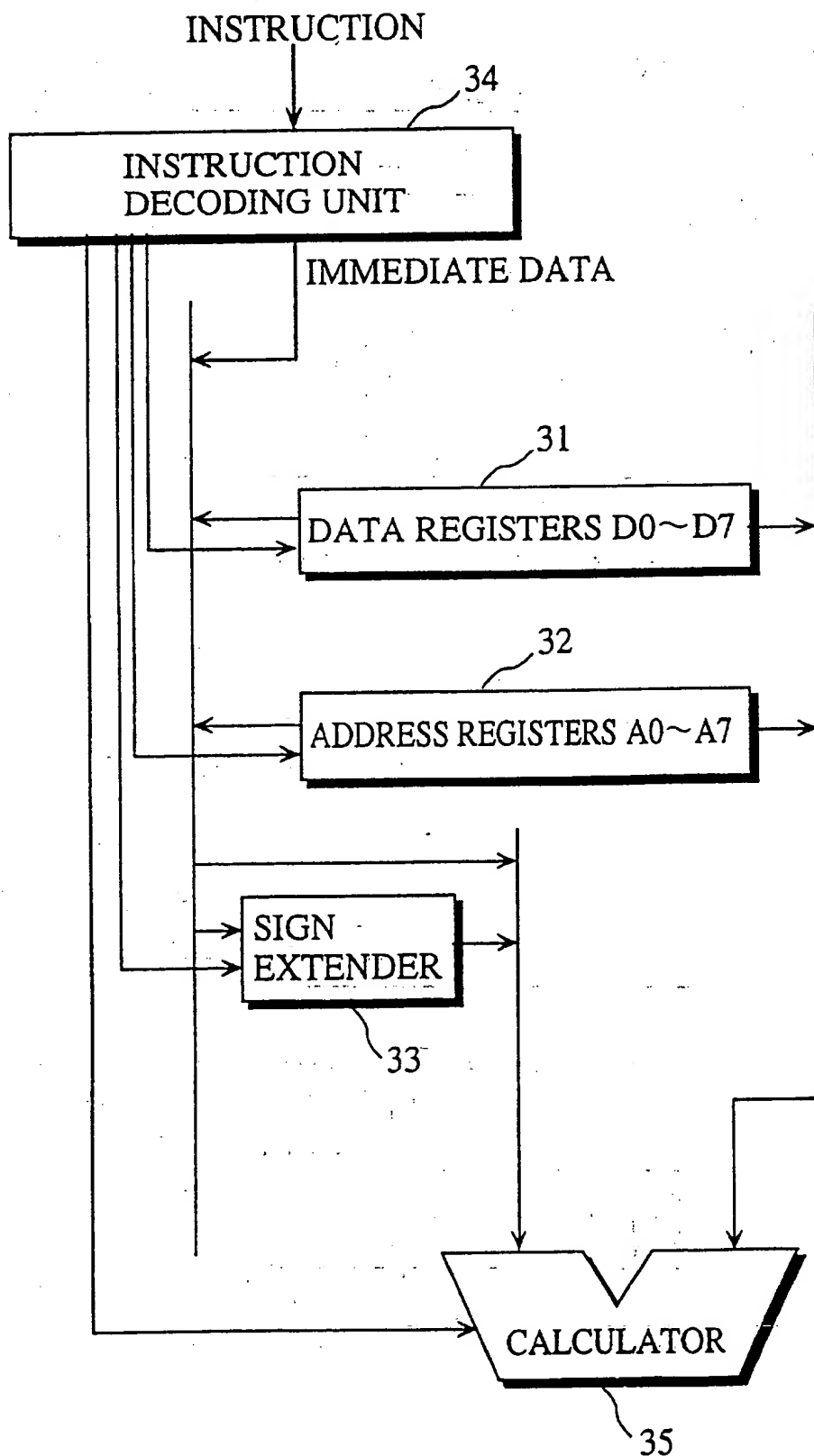


FIG. 4A PRIOR ART

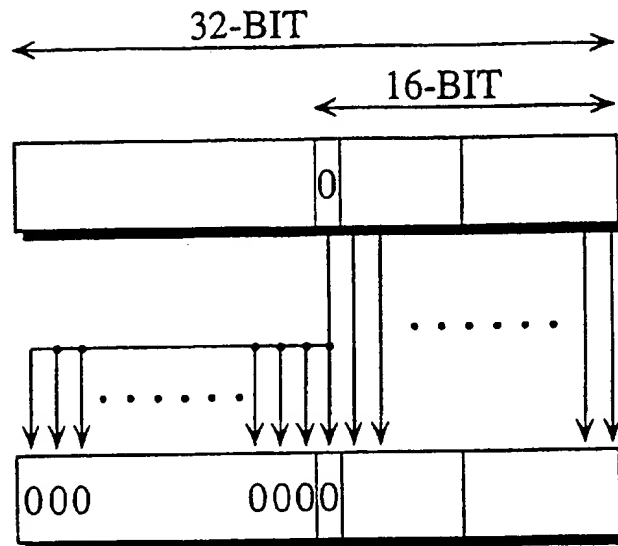


FIG. 4B PRIOR ART

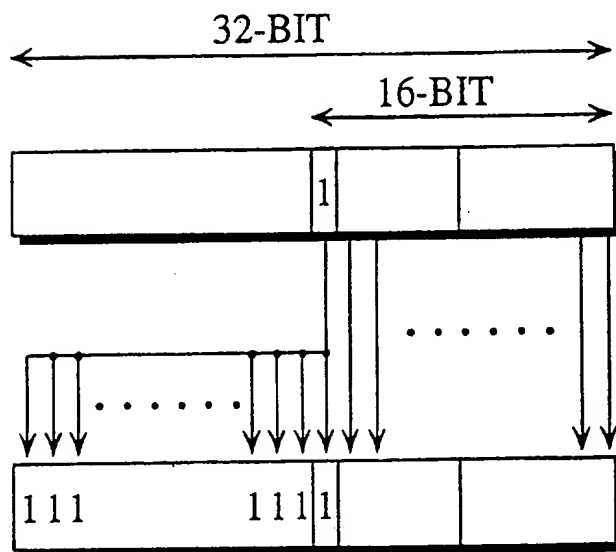


FIG. 5 PRIOR ART

| | | |
|---------|---------------|------------------------------|
| SUB | D0,D0 | —(1) |
| MOVI | #H8000,A0 | —(2)→MOVI #H00008000,A0 (2') |
| LABEL A | | |
| MOV | | |
| ADD | @A0,D1 | —(3) |
| ADDI | D1,D0 | —(4) |
| CMPI | #H0010,A0 | —(5)→ADDI #H00000010,A0 (5') |
| BLT | #H8100,A0 | —(6)→CMPI #H00008100,A0 (6') |
| | LABEL A | —(7) |
| LABEL B | | |
| MOV | | |
| | D0,@H10000000 | —(8) |

FIG. 6 PRIOR ART

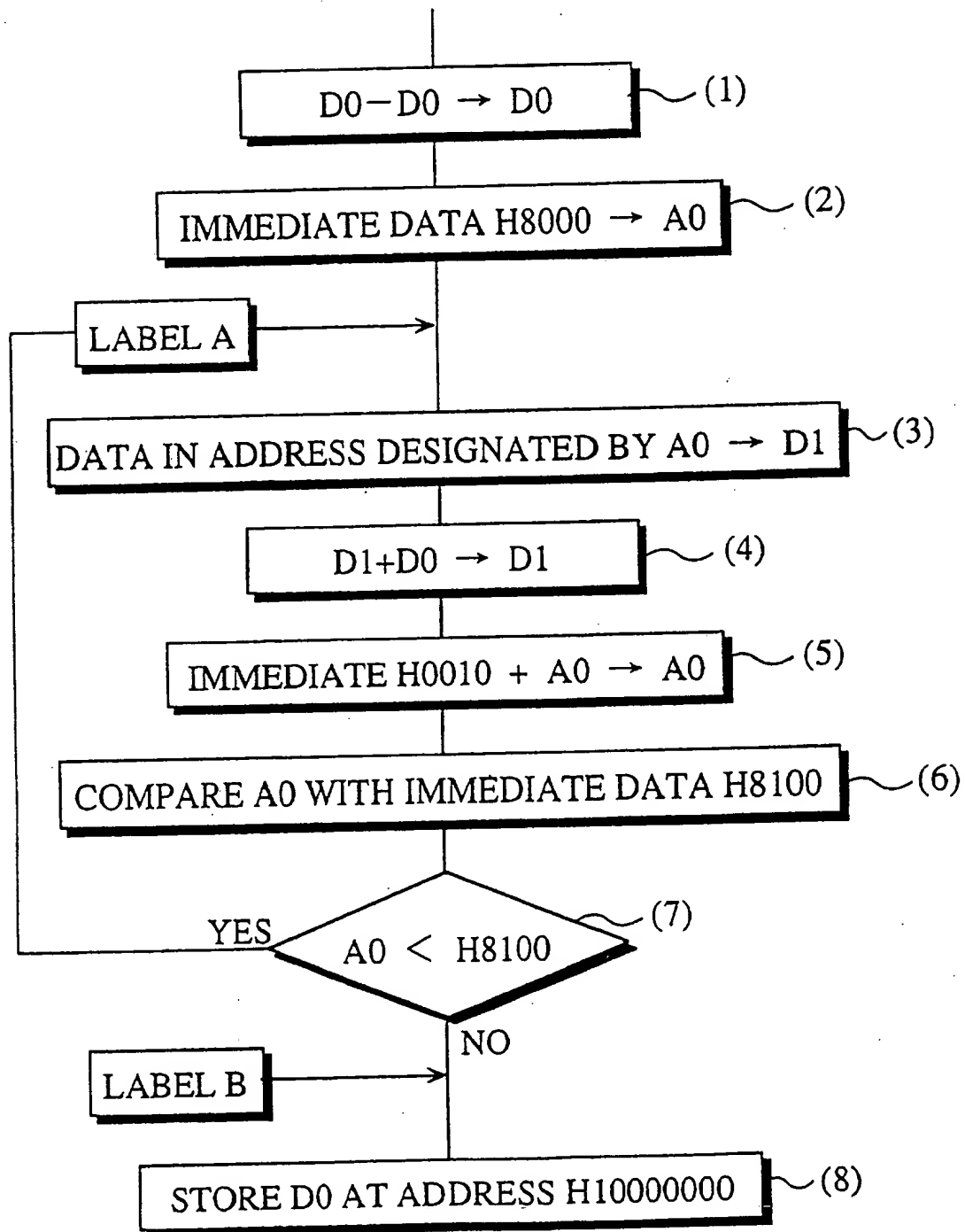


FIG. 7 PRIOR ART

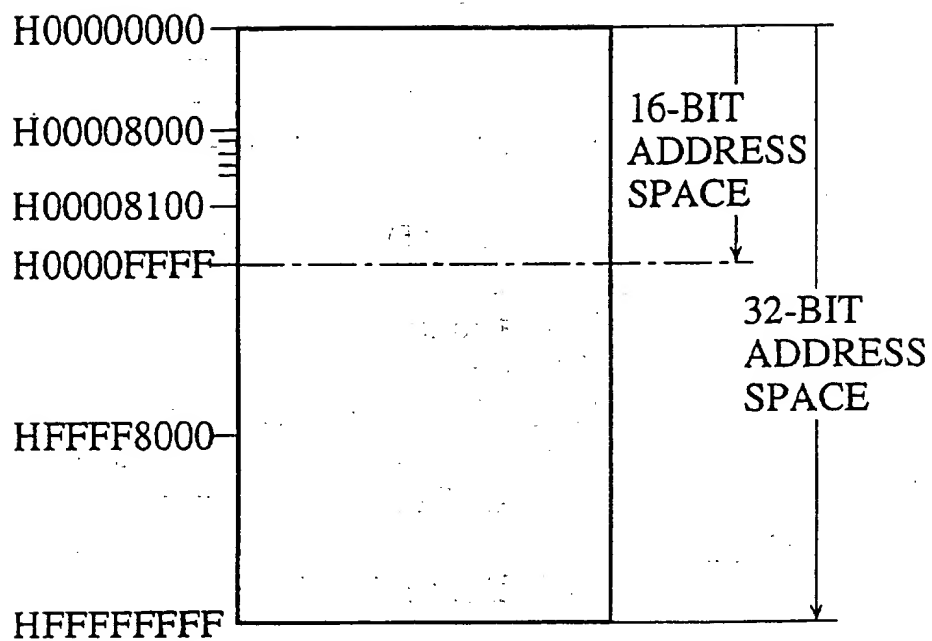


FIG. 8 PRIOR ART

SUB D0,D0 —(1)
MOVI #H8000,A0 —(2-1)
ANDI #H0000FFFF,A0 —(2-2)

LABEL A

MOV @A0,D1 —(3)
ADD D1,D0 —(4)
ADDI #H0010,A0 —(5)
MOVI #H8100,A0 —(6-1)
ANDI #H0000FFFF,A1 —(6-2)
CMP A1,A0 —(6-3)
BLT LABEL A —(7)

LABEL B

MOV D0,@H10000000 —(8)

FIG. 9 PRIOR ART

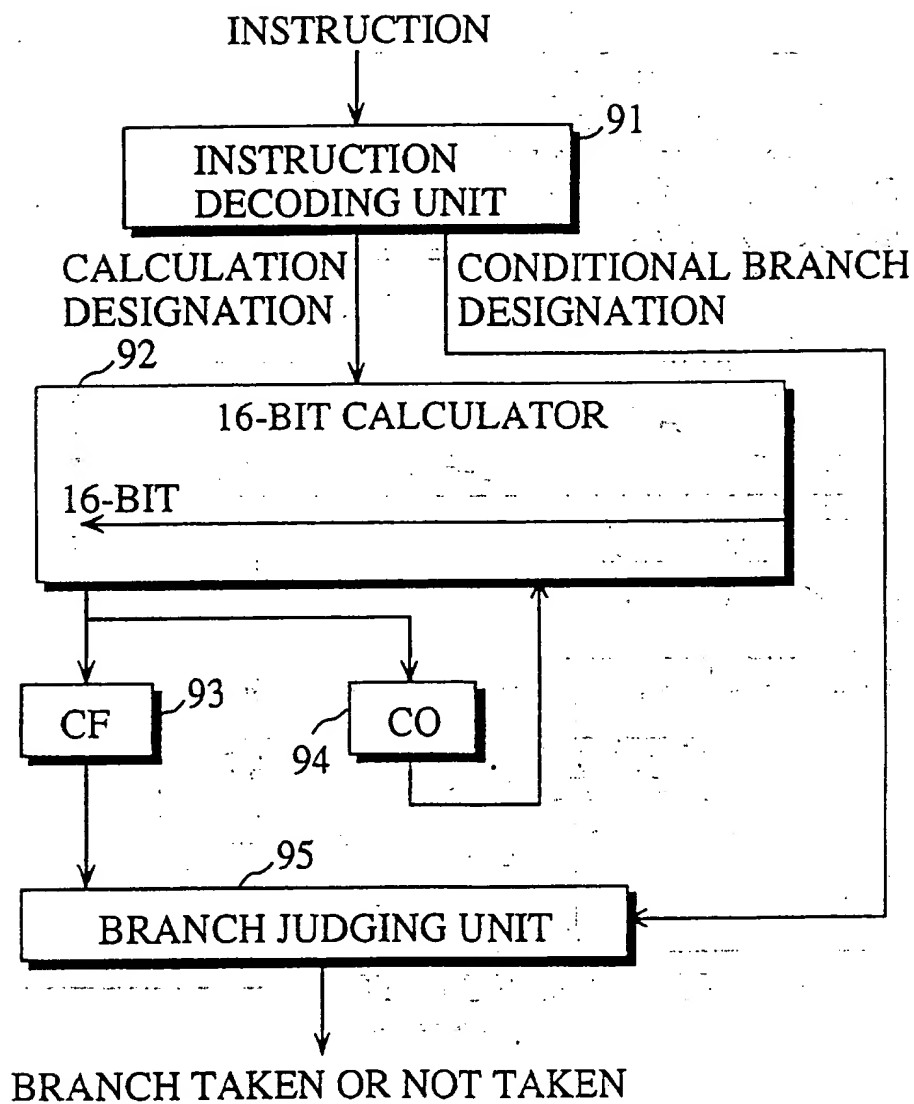


FIG. 10 PRIOR ART

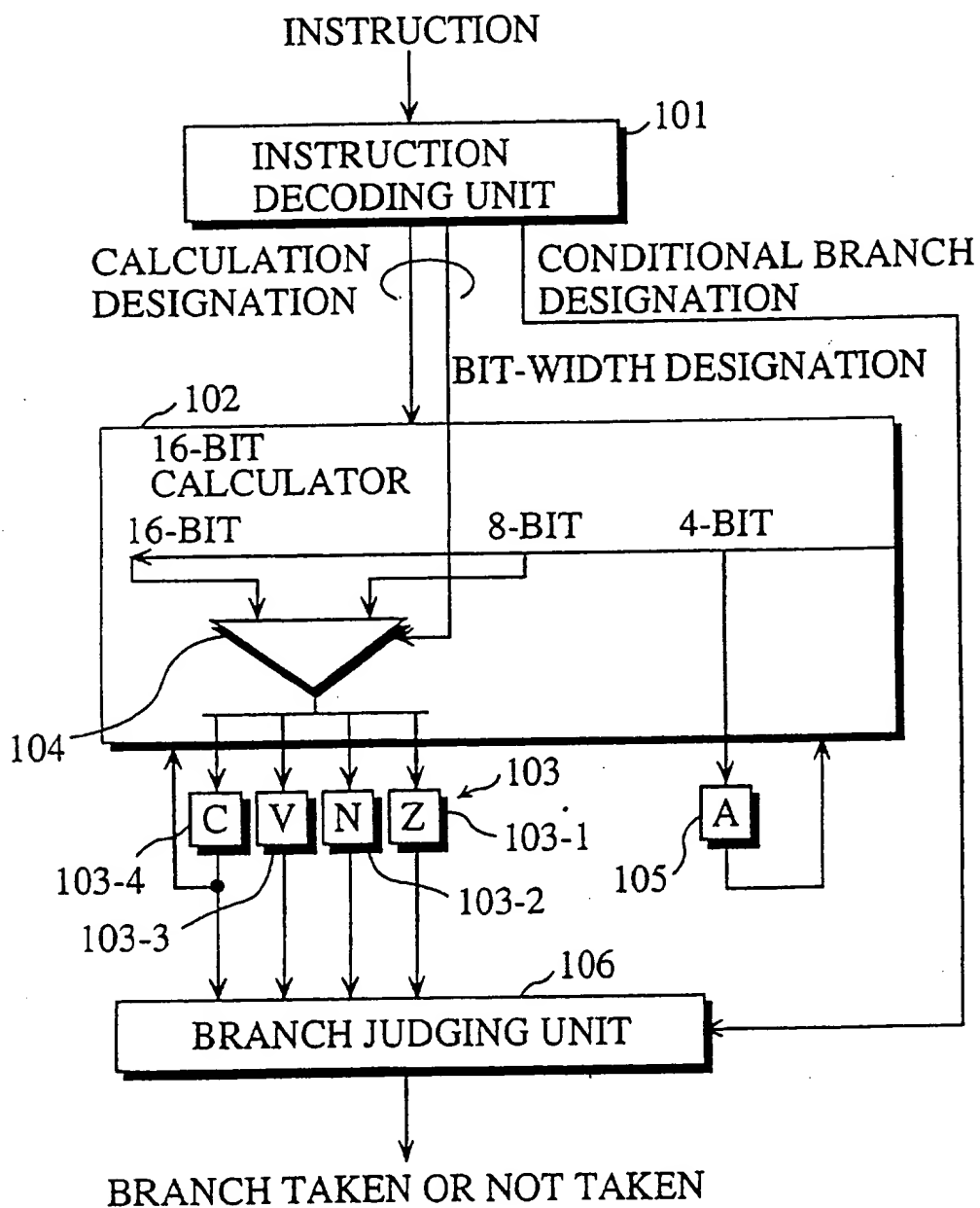


FIG. 11A PRIOR ART

ADD/SUBTRACT/COMPARE INSTRUCTIONS

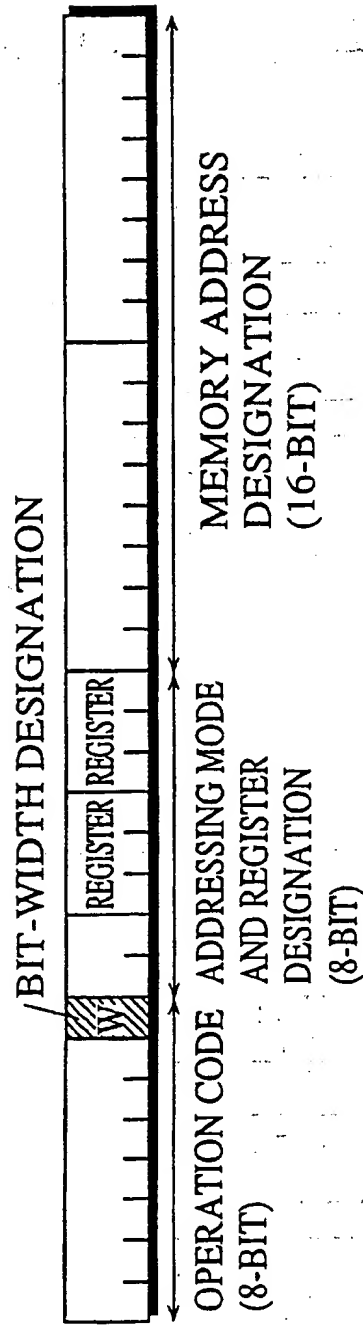


FIG. 11B PRIOR ART

CONDITIONAL BRANCH INSTRUCTION

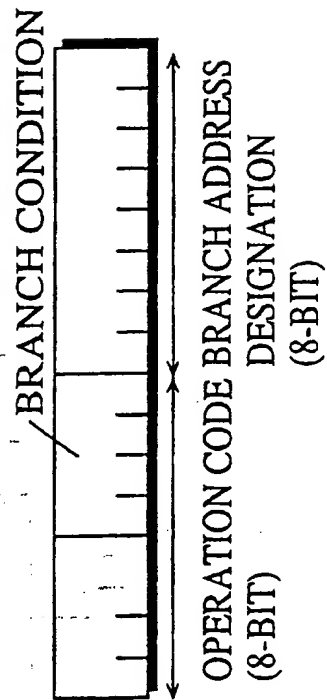


FIG. 12A PRIOR ART

| | |
|-----|-----|
| H00 | H88 |
| H00 | HF8 |
| +) | |
| H01 | H80 |

FIG. 12B PRIOR ART

| | |
|-----|-----|
| HFF | H88 |
| HFF | HF8 |
| +) | |
| HFF | H80 |

FIG. 13

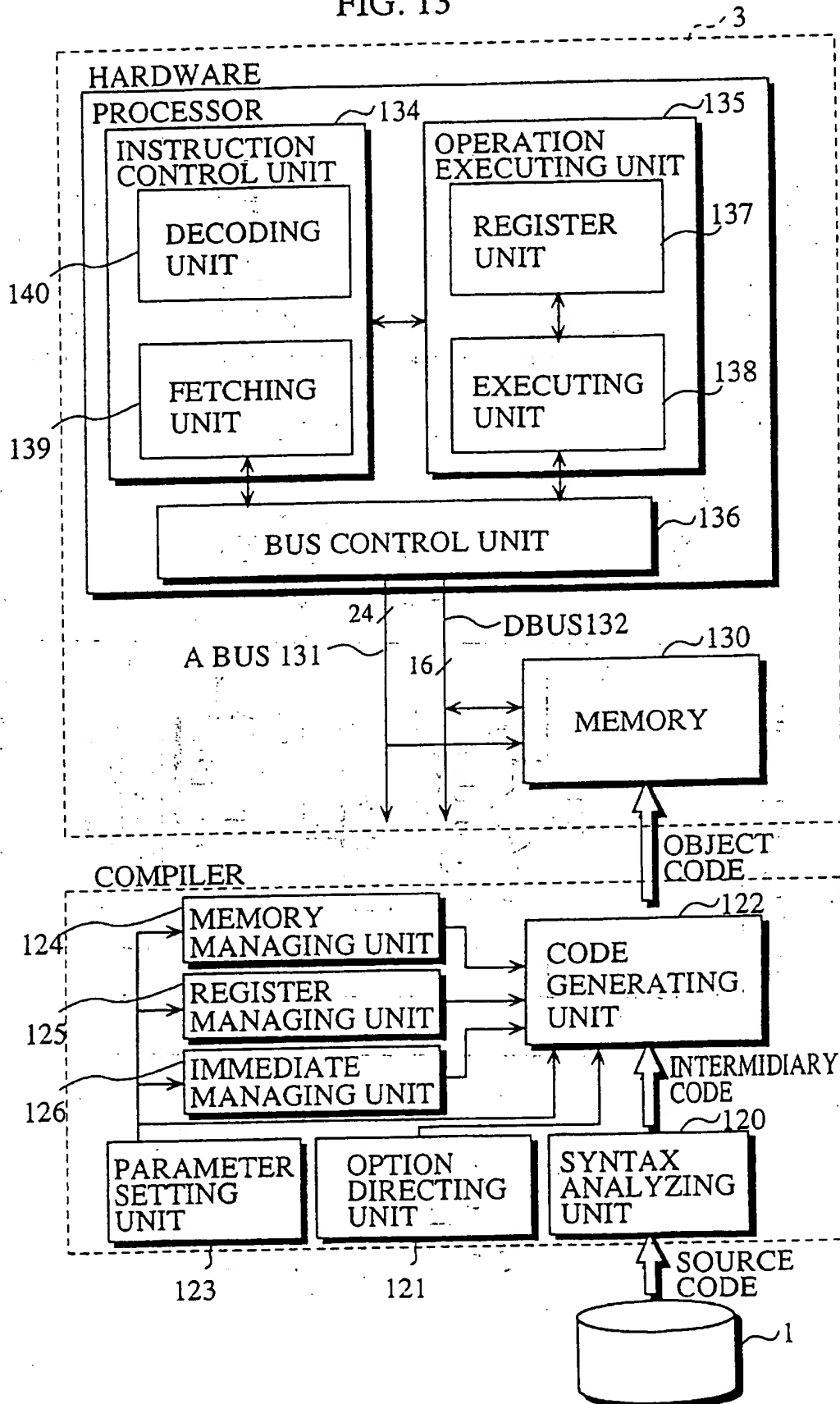


FIG. 14

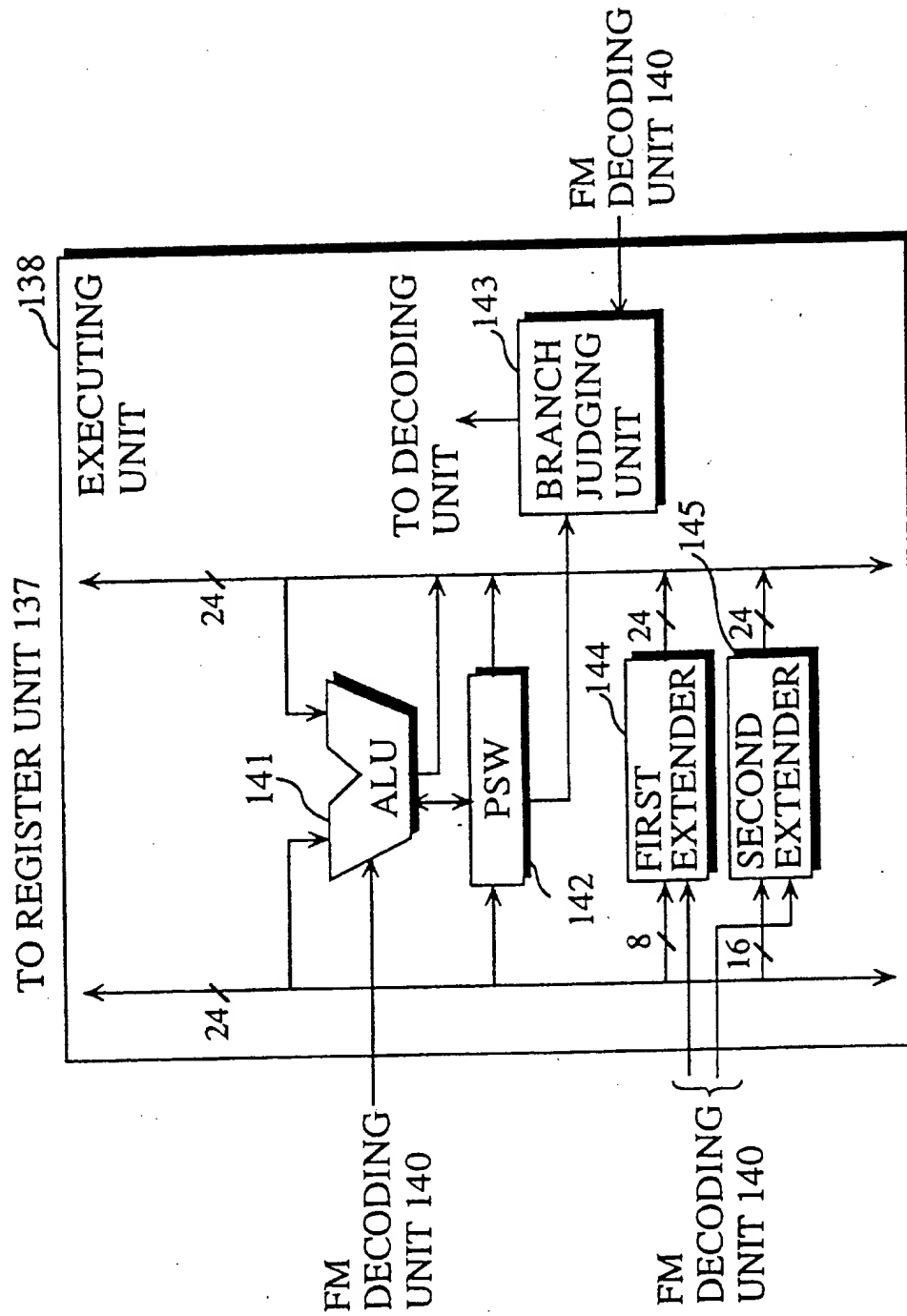


FIG. 15

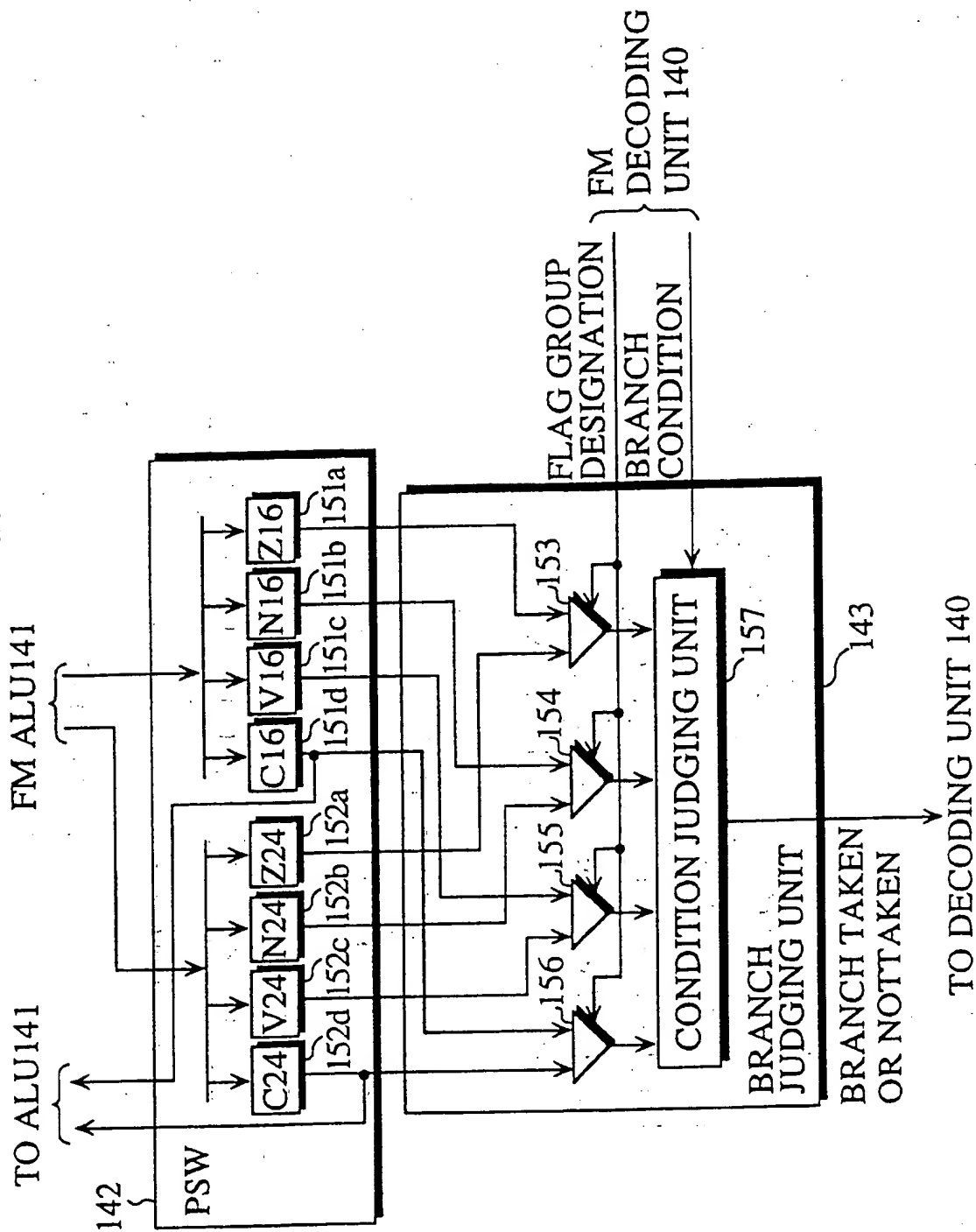


FIG. 16A

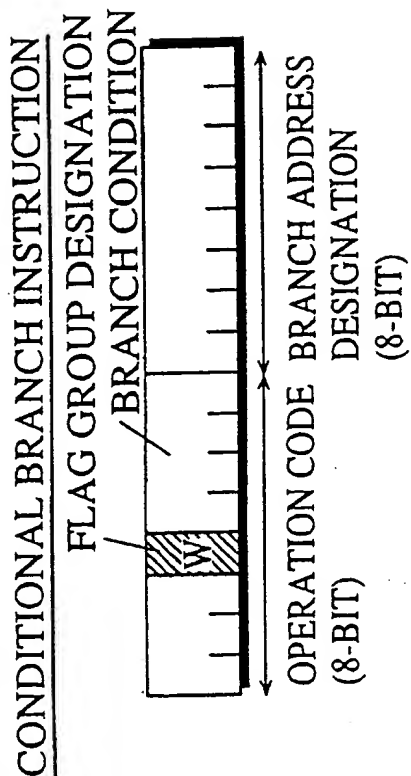


FIG. 16B

ADD/SUBTRACT/COMPARE INSTRUCTIONS

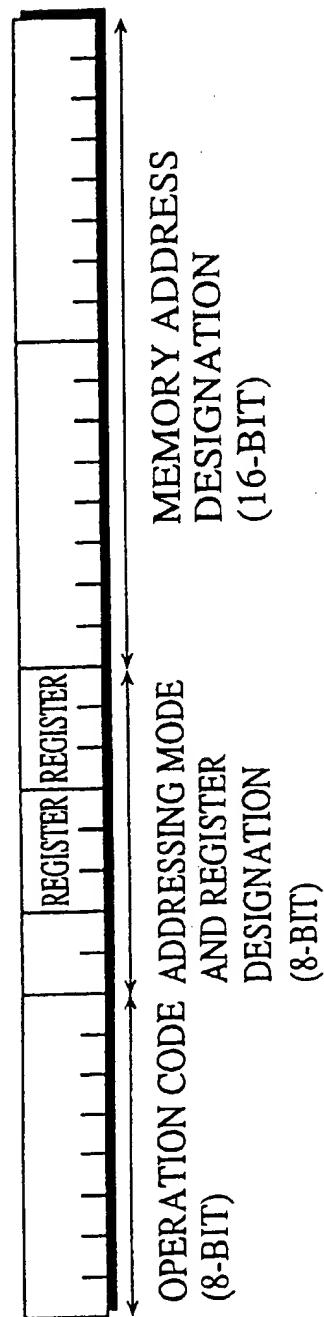


FIG. 17

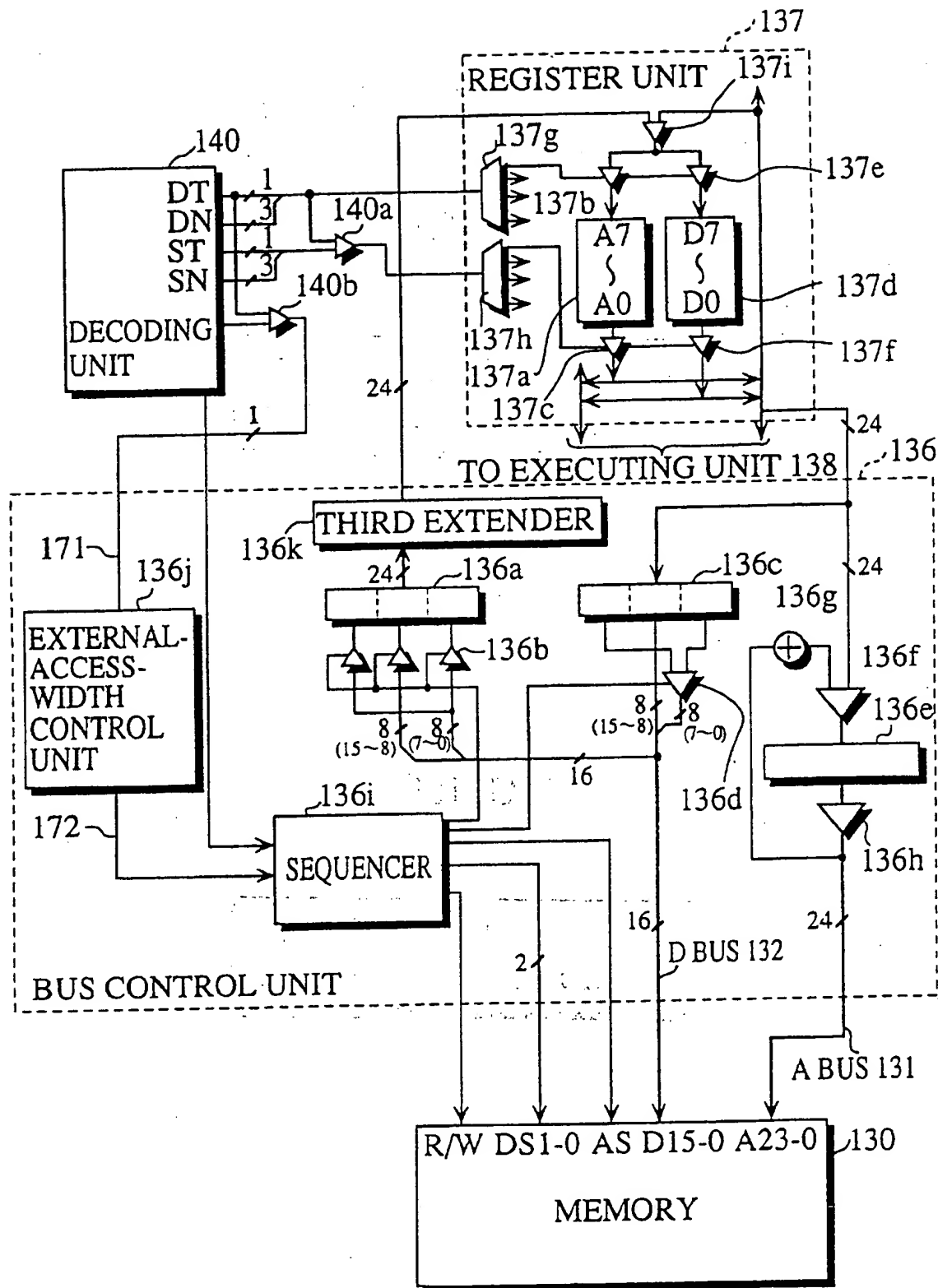


FIG. 18A

| OP | SRC | DEST |
|------|-----|------|
| MOVE | D1 | @A2 |

FIG. 18B

| OP | SRC | DEST |
|------|-----|------|
| MOVE | A1 | @A2 |

FIG. 19

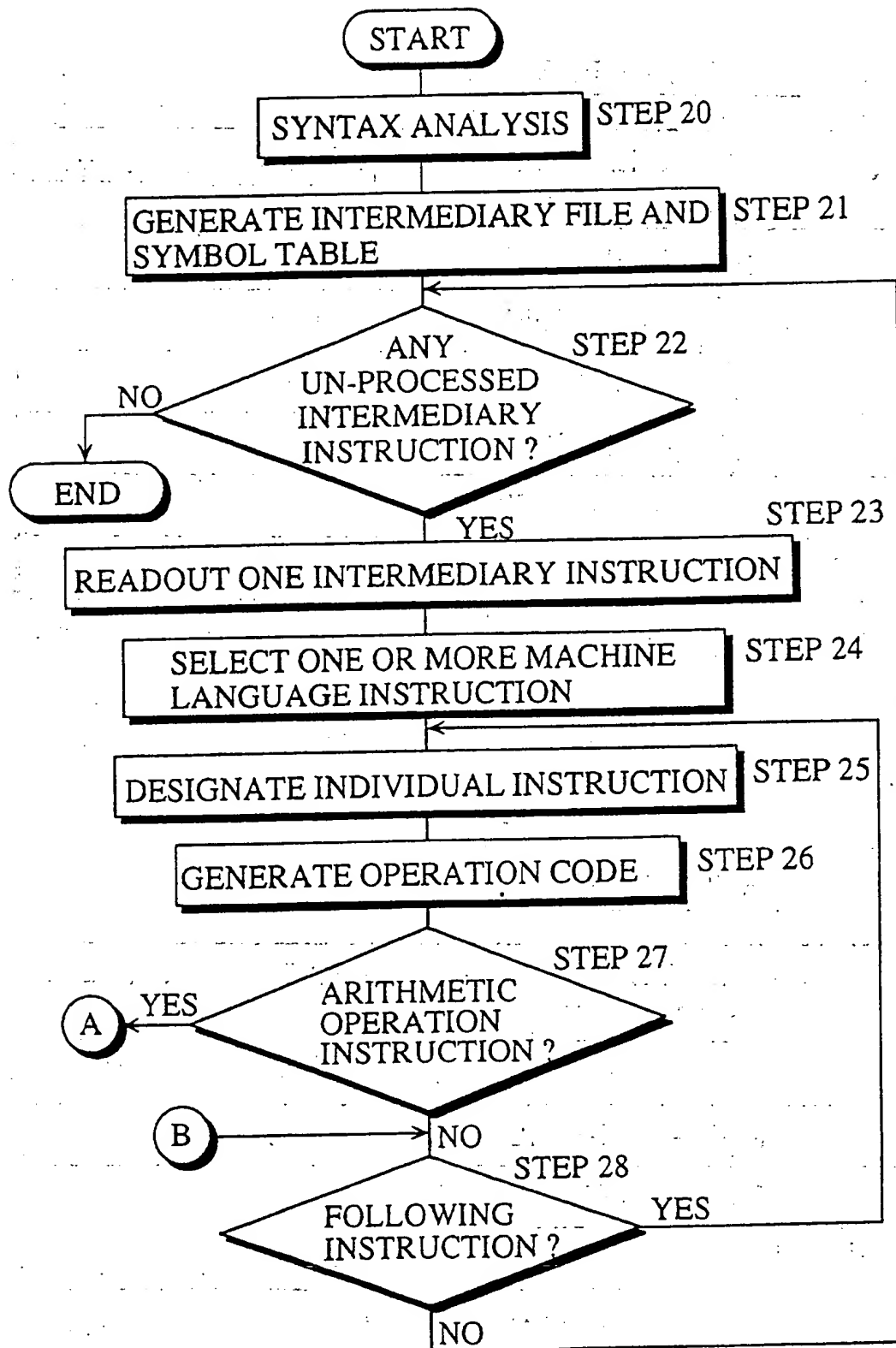


FIG. 20A

SYMBOL TABLE

| SYMBOL | VARIABLE TYPE | | No. of BYTE | HEAD ADDRESS | REGISTER |
|--------|---------------|---------|----------------|-----------------|----------|
| | SIGN | TYPE | | | |
| *a | UN-SIGNED | POINTER | 3 | 1000 | |
| b | UN-SIGNED | INTEGER | 2 | 1004 | |
| c | UN-SIGNED | INTEGER | 2 | 1006 | |
| t1 | UN-SIGNED | INTEGER | 2 | | |
| t2 | UN-SIGNED | INTEGER | 2 | | |
| t3 | UN-SIGNED | INTEGER | 2 | | |
| | | | | | |

FIG. 20B

SYMBOL TABLE

| SYMBOL | VARIABLE TYPE | | No. of BYTE | HEAD ADDRESS | REGISTER |
|--------|---------------|-----------|----------------|-----------------|----------|
| | SIGN | TYPE | | | |
| a | SIGNED | CHARACTER | 1 | 1000 | |
| b | UN-SIGNED | CHARACTER | 1 | 1001 | |
| c | SIGNED | INTEGER | 2 | 1002 | |
| d | UN-SIGNED | INTEGER | 2 | 1004 | |
| | | | | | |

FIG. 21

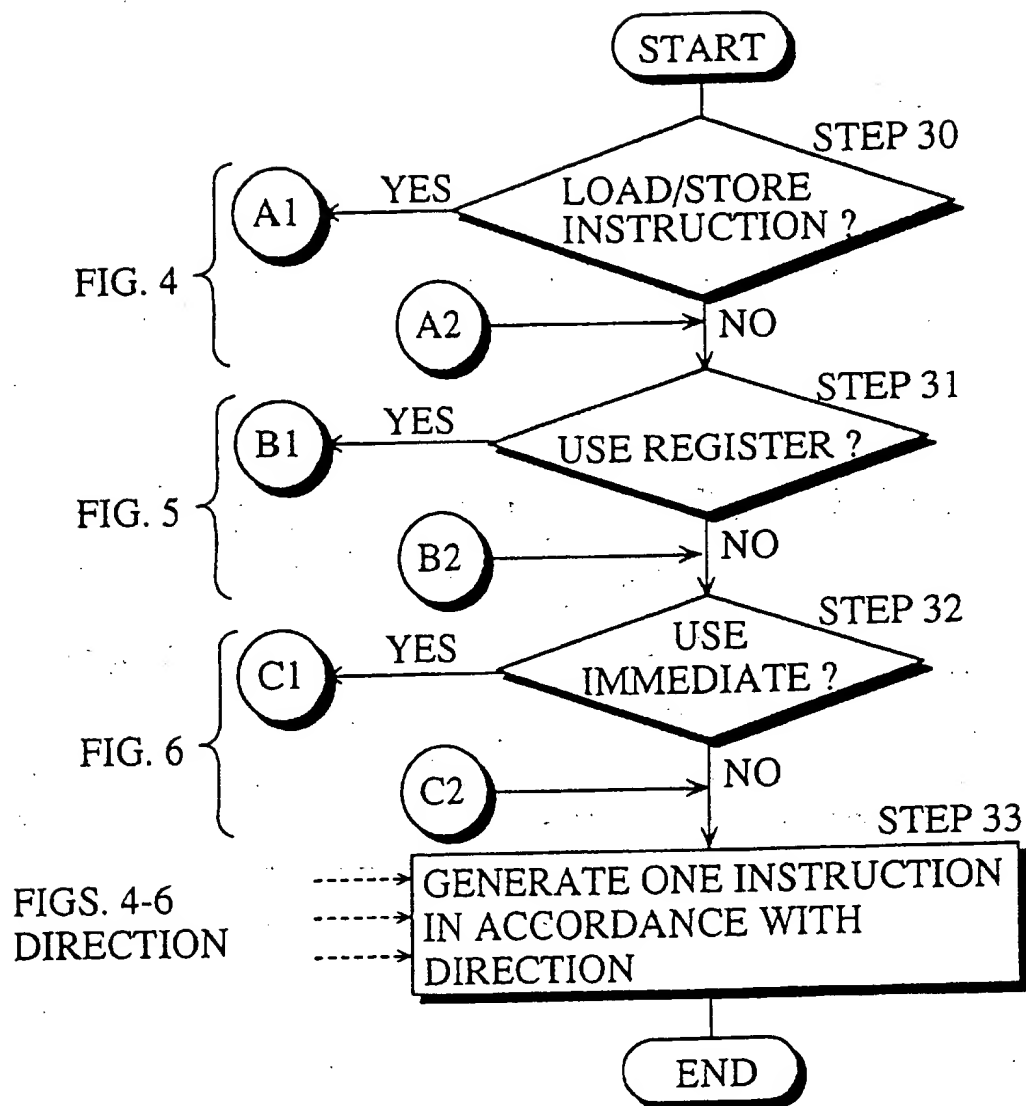


FIG. 22

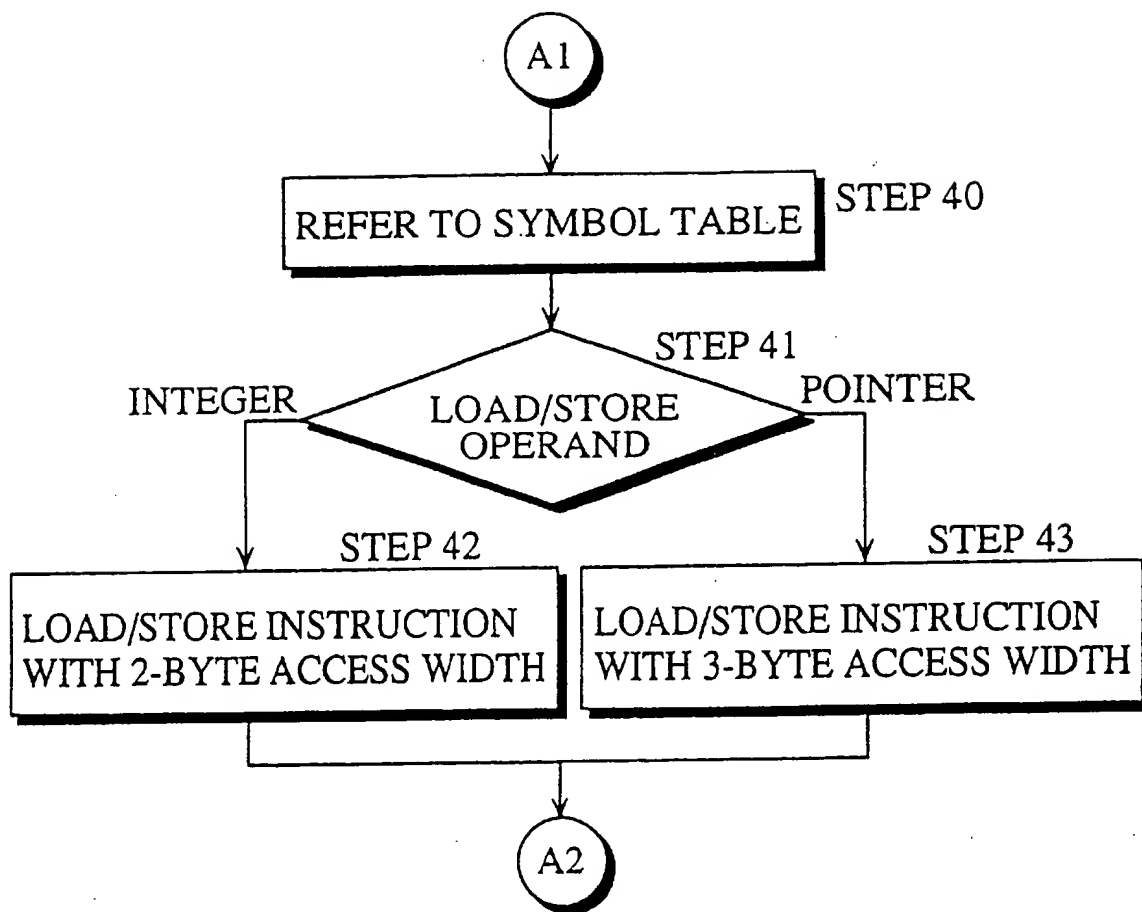


FIG. 23

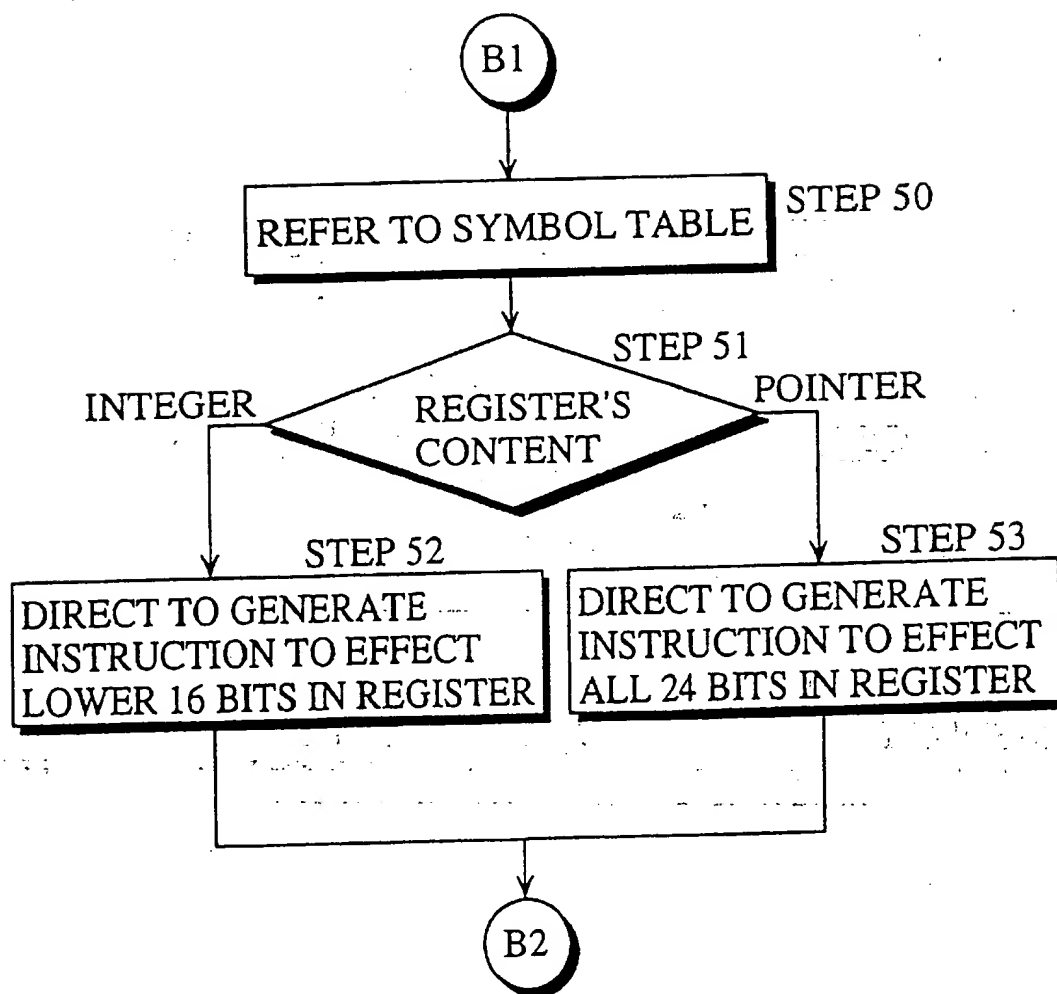


FIG. 24

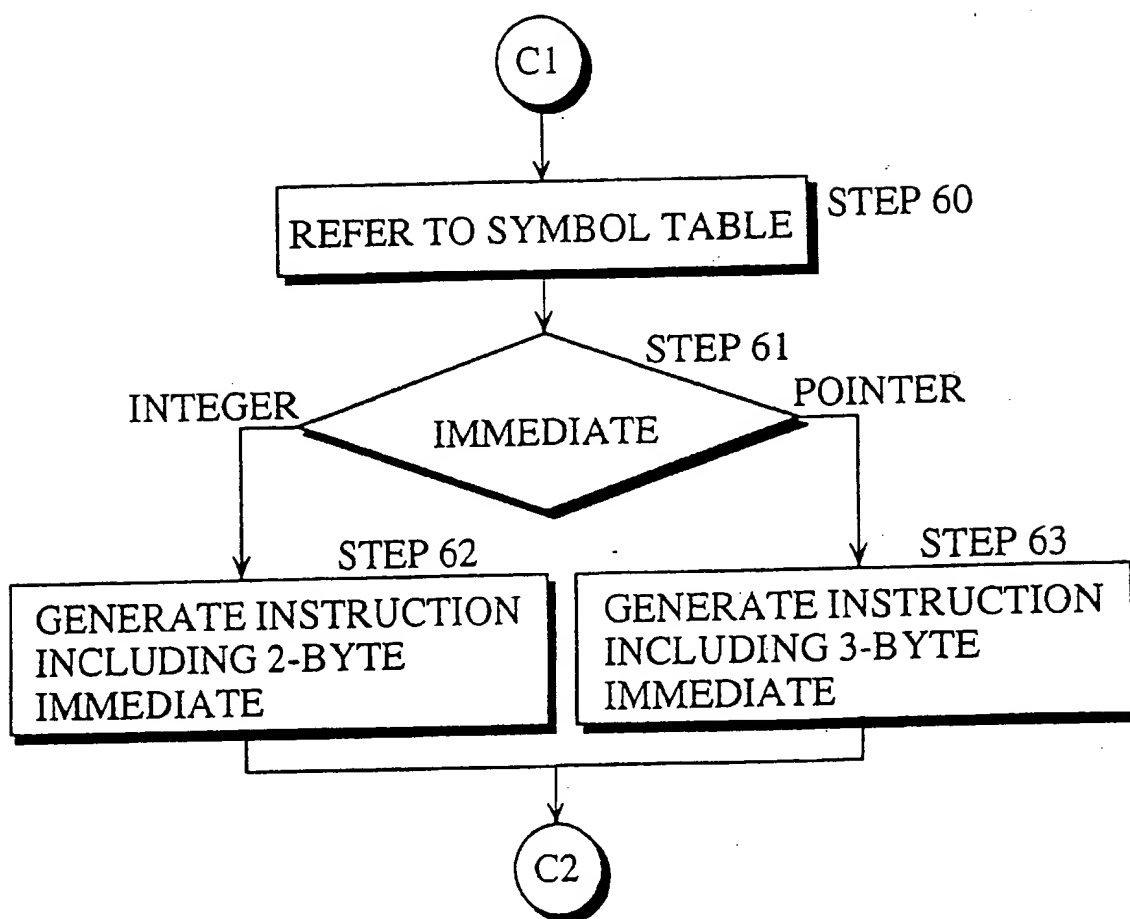


FIG. 25

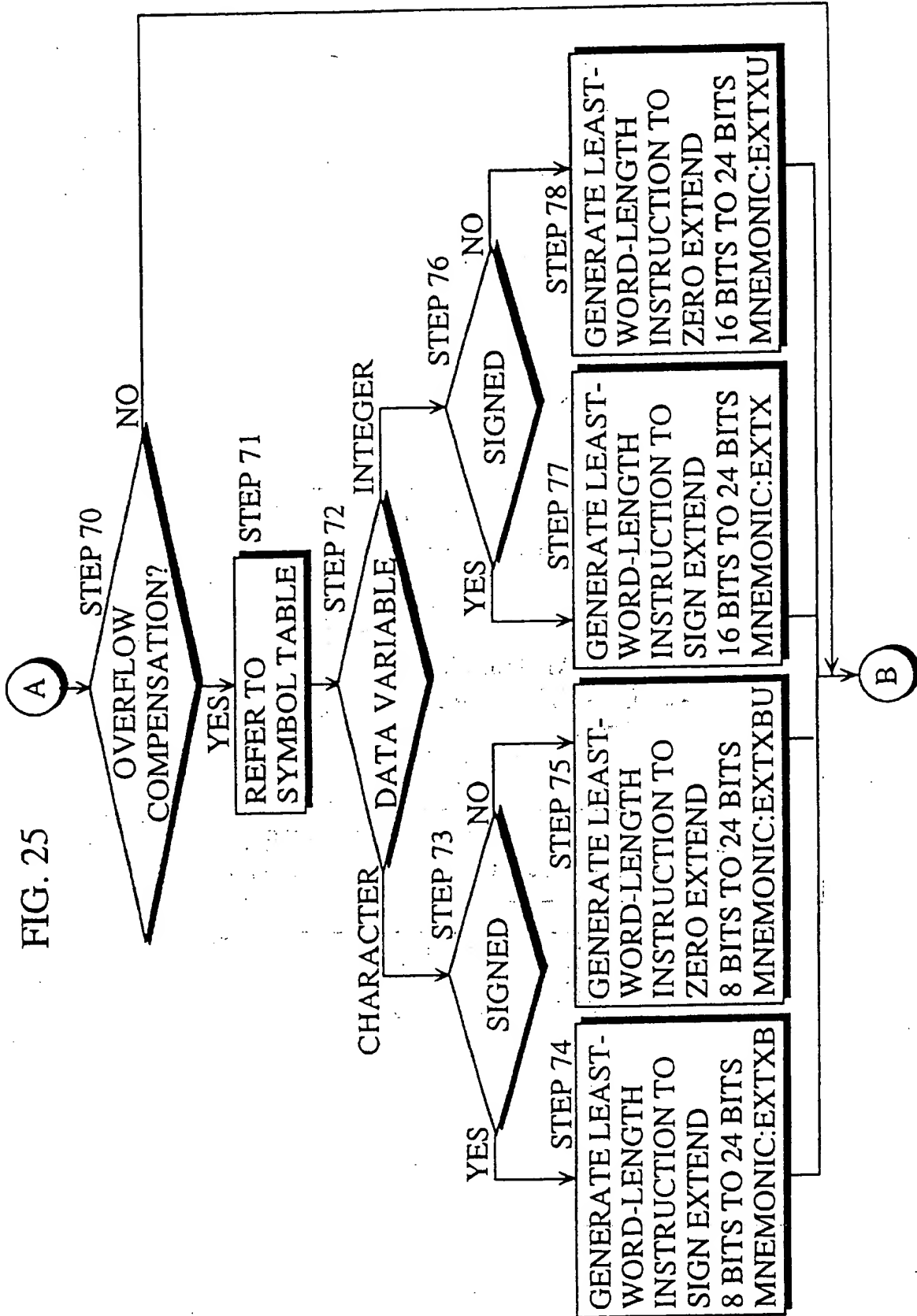


FIG. 26

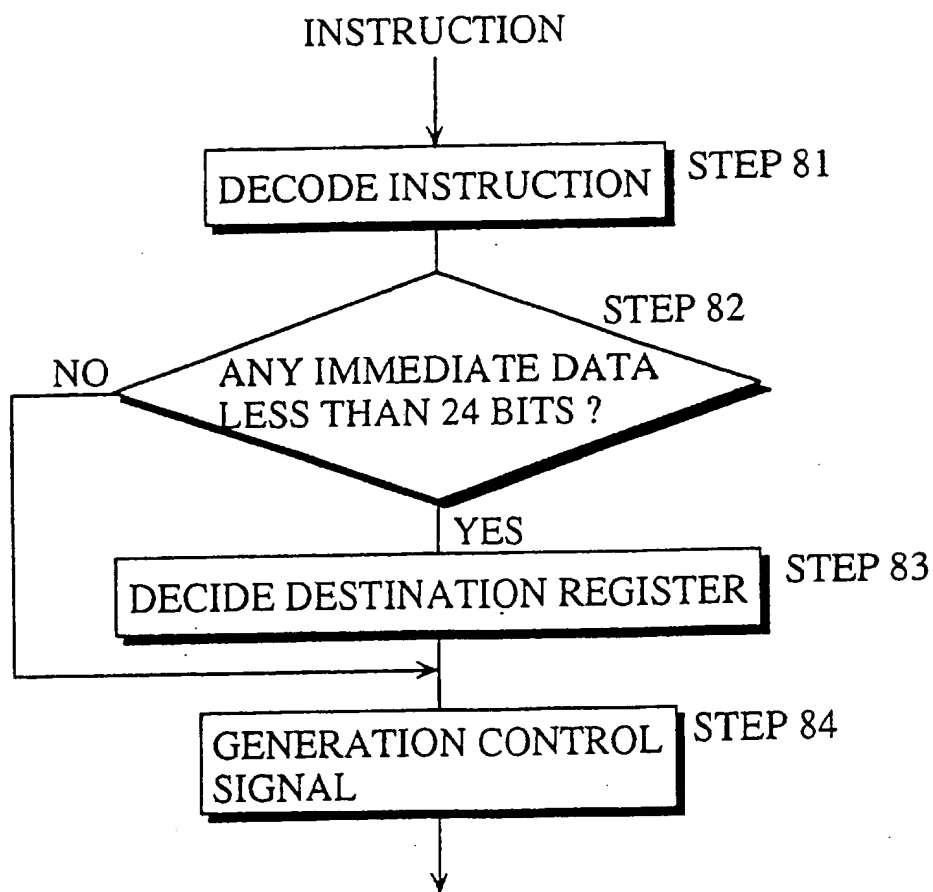


FIG. 27

SUB D0,D0 —(1)
MOVI #H8000,A0 —(2)
LABEL A
MOV @A0,D1 —(3)
ADD D1,D0 —(4)
ADDI #H0010,A0 —(5)
CMPI #H8100,A0 —(6)
BLT LABEL A —(7)
LABEL B
MOV D0,@H10000000 —(8)